What is claimed is:

1. A radiation directing device, comprising a screen having a mirrored surface interrupted by one or more pin holes that pass through said screen, said pin holes having an elliptical shape.

2. The radiation directing device of claim 1, wherein said mirrored surface comprises a planar surface.

3. The radiation directing device of claim 2, wherein said pin holes are disposed at a substantially non-orthogonal angle with respect to said planar surface.

4. The radiation directing device of claim 1, wherein the major axis of said elliptical pin holes is about 0.1 to 2 mm.

5. The radiation directing device of claim 1, wherein said mirrored surface further comprises a metallic layer contacting quartz.

6. The radiation directing device of claim 1, wherein said mirrored surface has dimensions of 18 mm by 18 mm.

7. The radiation directing device of claim 1, wherein said screen having a mirrored surface is interrupted by 3 pin holes passing through said screen.

8. A radiation directing device, comprising

(a) a screen having a mirrored surface interrupted by one or more pin holes passing through said screen; and

(b) a means for changing the direction of propagation for radiation beams passing through said one or more pin holes, said direction changing means and said one or more pin holes being juxtaposed.

9. The radiation directing device of claim 8, wherein said mirrored surface comprises a planar surface.

10. The radiation directing device of claim 8, wherein said pin holes are disposed at a substantially non-orthogonal angle β with respect to a planar surface of said screen.

11. The radiation directing device of claim 8, wherein the major axis of said elliptical pin holes is about 0.1 to 2 mm.

12. The radiation directing device of claim 8, wherein said mirrored surface further comprises a metallic layer contacting quartz.

13. The radiation directing device of claim 8, wherein said mirrored surface has dimensions of 18 mm by 18 mm.

14. The radiation directing device of claim 8, wherein said screen having a mirrored surface is interrupted by 2 or more pin holes passing through said screen.

15. The apparatus of claim 14, wherein the means for changing the direction of propagation is placed to direct the radiation beams passing through said 2 or more pin holes orthogonal to each other.

16. The radiation directing device of claim 14, wherein said means for changing direction further comprises placement at an angle β with respect to a line intersecting said pin holes.

17. The radiation directing device of claim 8, wherein said direction changing means comprises one or more prisms.

18. The radiation directing device of claim 8, wherein said one or more pin holes have an elliptical shape.

19. An apparatus for determining radiation beam alignment, comprising:

(a) a screen having a mirrored surface interrupted by one or more pin holes passing through said screen; and

(b) a means for detecting radiation reflected by said mirrored surface, wherein said detecting means determines a position of a radiation beam relative to said pin hole.

20. The apparatus of claim 19, wherein said mirrored surface comprises a planar surface.

21. The radiation directing device of claim 19, wherein said pin holes are disposed at a substantially non-orthogonal angle β with respect to a planar surface of said screen.

22. The apparatus of claim 19, wherein said mirrored surface is placed to reflect a radiation beam at an angle 2 times β.

23. The apparatus of claim 19, wherein said screen having a mirrored surface is interrupted by 2 or more pin holes passing through said screen.

24. The apparatus of claim 19, further comprising a means for changing the direction of propagation for radiation beams passing through said one or more pin holes, said direction changing means and said pin holes being juxtaposed.

25. The apparatus of claim 24, wherein said means for changing the direction of propagation is placed to direct said radiation beams passing through said 2 or more pin holes orthogonal to each other.

26. The radiation directing device of claim 23, wherein said means for changing direction further comprises placement at an angle β with respect to a line intersecting said pin holes.

27. The apparatus of claim 26, wherein said direction changing means further comprises one or more prisms.

28. The apparatus of claim 19, wherein said one or more pin holes have an elliptical shape.

29. The apparatus of claim 19, wherein said radiation detecting means further comprises an image detection device.

30. The apparatus of claim 19, further comprising a means for collimating radiation reflected by said mirrored surface, said collimating means placed to direct radiation to said radiation detecting means.

31. The apparatus of claim 19, further comprising a means for directing radiation reflected by said radiation reflecting means to said radiation detecting means.

32. The apparatus of claim 19, further comprising a means for directing radiation to said screen.

33. A radiation beam aligning apparatus, comprising:

(a) a flow chamber;

(b) a screen having a mirrored surface interrupted by one or more pin holes passing through said screen;

(c) a means for directing radiation from said flow chamber to said screen; and

(d) a means for detecting radiation reflected by said mirrored surface, wherein said detecting means determines a position of a radiation beam relative to said pin hole.

34. The apparatus of claim 33, wherein said mirrored surface comprises a planar surface.

35. The radiation directing device of claim 33, wherein said pin holes are disposed at a substantially non-orthogonal angle β with respect to a planar surface of said screen.

36. The apparatus of claim 33, wherein said mirrored surface is placed to reflect a radiation beam at an angle 2 times β.

37. The apparatus of claim 33, wherein said screen having a mirrored surface is interrupted by 2 or more pin holes passing through said screen.

38. The apparatus of claim 37, wherein the means for changing the direction of propagation is placed to direct the radiation beams passing through said 2 or more pin holes orthogonal to each other.

39. The apparatus of claim 33, further comprising a means for changing the direction of propagation for radiation beams passing through said one or more pin holes, said direction changing means and said pin holes being juxtaposed.

40. The radiation directing device of claim 37, wherein said means for changing direction further comprises placement at an angle β with respect to a line intersecting said pin holes.

41. The apparatus of claim 40, wherein said direction changing means further comprises one or more prisms.

42. The apparatus of claim 33, wherein said one or more pin holes have an elliptical shape.

43. The apparatus of claim 33, wherein said radiation detecting means further comprises an image detection device.

44. The apparatus of claim 33, further comprising a means for collimating radiation reflected by said mirrored surface, said collimating means placed to direct radiation to said radiation detecting means.

45. The apparatus of claim 33, further comprising a means for directing radiation reflected by said radiation reflecting means to said radiation detecting means.

46. The apparatus of claim 33, wherein said radiation directing means comprises a lens.

47. A flow cytometer comprising the apparatus of claim 33.

48. An automated system for aligning a radiation beam, comprising:

(a) a screen having a mirrored surface interrupted by one or more pin holes passing through said screen;

(b) a means for directing a radiation beam to said screen, said directing means optionally attached to a positioning device;

(c) a means for detecting radiation reflected by said mirrored surface, wherein said detecting means determines a position of a radiation beam relative to said pin hole; and

(d) a computer systems controlling movement of said positioning device, said computer system receiving a signal from said detection means and sending a processed output signal to said positioning device, wherein said output signal directs the movement of said positioning device.

49. The automated system of claim 48, further comprising a flow chamber, said flow chamber attached to said positioning device.

50. The automated system of claim 48, further comprising a means for directing radiation from a radiation source to a flow chamber, said radiation directing means attached to said positioning device.